ABSTRACT OF THE DISCLOSURE

Disclosed are a system and a method for statistically predicting an interaction probability between proteins, and more particularly to a system and a method for predicting an interaction probability between an unknown protein pair based on information obtained by analyzing differences between interacting and non-interacting sets of protein pairs from the view point of domain combination. The prediction method includes the steps of (a) obtaining appearance frequency information of a designated domain combination selected from each of interacting and non-interacting sets of protein pairs, and storing the obtained appearance frequency information, (b) determining a probability equation applied to predict the interaction between two proteins using the stored appearance frequency information of the domain combination, and (c) obtaining an interaction probability value between the two proteins from the determined probability equation.

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